

REMARKS

Reconsideration of the present application is respectfully requested. The Examiner is thanked for the indication that claims 18 and 20 are allowed and that claims 2 and 22 contain patentable subject matter.

Claims 3-7, 11-12, 16-17, 19 and 21 were rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 3-7, 11-12, 16-17, 19, and 21-22 have been amended to address the matter raised by the Examiner. Withdrawal of the § 112 (2) rejections is respectfully requested.

Claims 1, 3-5, 7 and 16 were rejected under 35 USC § 103 as being unpatentable over United States Patent No. 3,391,859 to Waldman in view of United States Patent No. 6,371,722 to Takahashi. The § 103 rejections are respectfully traversed. The Manual of Patent Examination Procedure provides that "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness." See, MPEP § 2142. "To establish a *prima facie* case of obviousness the prior art reference (or references where combined) must teach or suggest all the claim limitations." See, *Id* "The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. . . It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." In re Fine, 837 F.2d 1071, 1074.

Upon review of the primary reference '895 to Waldman there is taught and suggested a turbocharger including a compressor with a diffuser passage 22 having a variable cross sectional area. More specifically, the "diffuser passage 22 is formed by a fixed diffuser wall 23 on one side which is an integral part of the compressor housing and an adjustable diffuser wall 24 on the opposite side. . . ." U.S. Patent No. 3,391,859, Col. 2, L. 9-12. The '859 reference further provides:

[t]o accomplish the purpose of the present invention, the cross sectional area of the diffuser space between the walls 23 and 24 should be increased for high engine speed and high velocity of air passing therethrough and decreased when the velocity decreases. This is accomplished automatically because air passing the air foils 30 in the direction indicated by arrows in FIG. 2 produces a low pressure area on the downstream side of the air foil to cause withdrawal of air through passages 29. This causes partial collapsing of the bellows 28 and receding of the wall 24 to enlarge the diffuser area. The bellows 28 are formed of material having resilient qualities tending to retain the wall 24 in its extended or low speed position

U.S. Patent No. 3,391,859, Col. 2, L. 38-49.

Claim 1, as amended defines a compressor housing having a fixed geometry annular outlet diffuser. The '859 reference teaches and suggests a variable geometry outlet diffuser. Withdrawal of the § 103 rejection of claim 1 is respectfully requested as the proposed combination does not teach or suggest all of the claim limitations.

The language of claim 1 provides that "a portion of at least one of said wall surfaces is resiliently flexible such that operational pressure changes within said outlet diffuser cause the resilient wall surface portion to flex." In contrast the '859 reference teaches an adjustable diffuser wall 24 the position of which is

controlled by a bellows 28. The secondary reference to Takahashi teaches and suggests in the embodiment of FIG. 4 a system for isolating the turbine shroud 9 from the turbine housing 1. A “seal ring 27 in a shape similar to a piston ring is equipped in the axial insert portion between above-mentioned turbine shroud 9 and turbine housing 1.” U.S. Patent No. 6,371,722, Col. 4, L. 40-43. The ‘722 provides that the “shroud 9 is isolated from turbine housing 1, any thermal deformation of turbine housing 1 no longer directly affects turbine shroud 9.” U.S. Patent No. 6,371,722, Col. 4, L. 45-47. It is presently understood that seal ring 27 is a gasket remote from the fluid flow path in the diffuser. Therefore, it does not follow why someone of ordinary skill in the art would replace a moveable wall in Waldman ‘859 with a gasket/sealing ring 27.


The rationale provided by the Office Action is that “[i]t would have been obvious at the time the invention was made to one of ordinary skill in the art to replace the plate 24 and bellows of Waldman with the gasket 25 of Takahashi in order to build a simplified resiliently flexible wall surface of one consistent material in order to improve performance during thermal deformation.” Office Action, P. 4, L. 1-5. The Applicant does not follow how one would create a moveable diffuser wall 24 from this proposed substitution. The proposed modification, as currently understood, would appear to render the ‘859 reference inoperable for its intended purpose. The Examiner is respectfully requested to withdraw the § 103 rejection or provide further detail regarding the proposed combination to enable the Applicant an opportunity to respond.

The Dependent claims 2-17 and 19-22 are at least allowable as they depend from independent claims that are believed allowable.

The Office Action provides that Waldman teaches and suggests the invention of dependent claim 5 and 16. The Office Action provides that "Waldman discloses a wall surface (24) inset into a recess defined in a wall of the housing (12). The Applicant respectfully disagrees with this characterization of the teaching of the '859 reference. The Examiner is respectfully requested to reevaluate this position and withdraw the rejection of claim 5.

The Examiner is respectfully requested to issue a Notice of Allowability for the pending claims. If there are any outstanding issues that could be addressed in a telephone conference the undersigned would welcome such a call.

Respectfully Submitted,



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